



NEVADA CLIMATE SUMMARY

Quarterly Summary 2007
January, February, March
Volume 24, Numbers 1-3

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MAY 21 2007

JANUARY-MARCH CONDITIONS

By David Walker

STATE PUBLICATIONS

Western Nevada

The first few days of January were 10 to 15° warmer than normal. A strong cold Pacific storm moved in the 4th and 5th bringing 10-20 inches of snow to the Sierra and a few inches in the valleys. Ninety five car accidents happened in Reno alone during this storm. Only one more system came in during the month. It was accompanied by the typical high winds but only a few inches of snow fell in the mountains. Cold temperatures persisted for the rest of the month while a high pressure set up over the area. Precipitation amounts for the month were below average with the greatest amounts in the Middlegate area with 70% of normal and the least in the Carson range at Daggett Pass with 3% of normal.

The high pressure continued into the first week of February. Then the 8th through 11th a storm came through with tropical moisture and dumped 2 to 3 feet of snow in the Sierra. A ski patroller at Mt. Rose was injured in an avalanche during control work accompanying this storm. A few more storms swept through the region in late February. On the 22nd and 23rd one to two feet of snow fell in the mountains. An even larger storm the 24-27th left 80 inches of snow at Alpine Ski Area and 8 inches at the National Weather Service office in Reno. Along with this storm were winds in the Lake Crowley area that blew in windows on homes and vehicles! The temperatures for the month were 2.3° above normal and precipitation was above normal in the northwestern corner of the state. The south and eastern part of the region had near to below normal precipitation. Inlay had 187% and

Yerington 14% of normal precipitation respectively for the month.

March would turn out to be the third warmest on record in Reno at 49.4°. This is 6.1° above normal! These high temperatures were the result of a high pressure pattern over the Great Basin for most of the month. There was a record high temperature in Reno on the 12th of 80°. The only significant storm of the month occurred on the 26th. The northern Great Basin ended the month at 10% of normal precipitation for March.

Eastern Nevada

Temperature and precipitation were both below normal for January. A cold front the first week of the month brought the only significant precipitation for the whole month. On the 11th a strong blast of Arctic air invaded the region with a northerly flow. Inversions settled into the valleys leading to low temperatures near zero and high's only getting to the 20's. A slow warming trend finished the month.

The warming trend from a high pressure system went into the first week of February. The second week of February the same deep trough that affected the western part of the state was over the entire northern Great Basin. This lead to more precipitation in the eastern part of the Basin with many days of precipitation for the rest of the month. Winnemucca had 240% of normal precipitation and Ely was at 188% of normal for the month.

In March the precipitation tapered off. Cold temperatures and small amounts of precipitation fell over the area the first week of March then high pressure set up and started melting the snowpack.

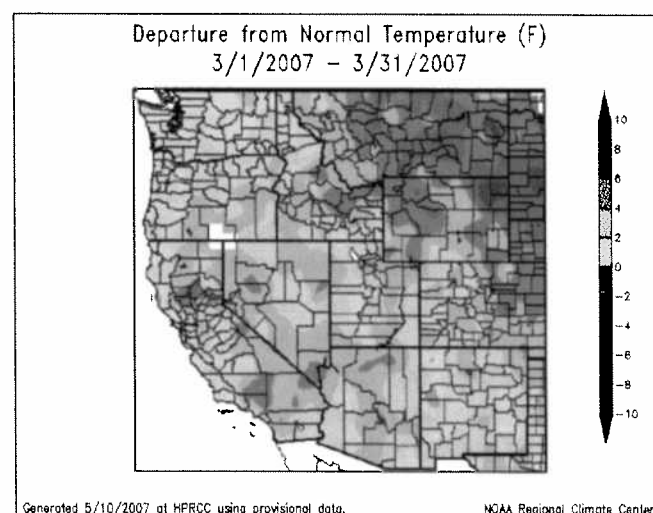
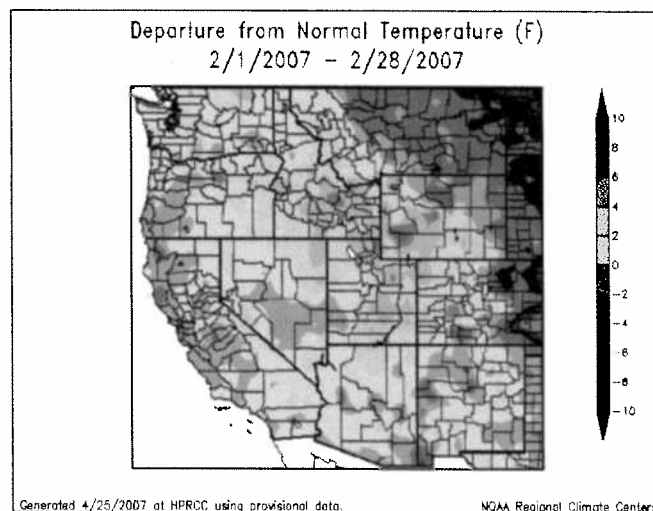
On the first day of spring a system moved in and left several inches of snow in the valleys. A week later an even stronger system brought cold temperatures and gusty wind along with the snow. The town of Lamoille received 15 inches of snow from this storm. Still the month ended with below normal precipitation amounts.

Southern Nevada

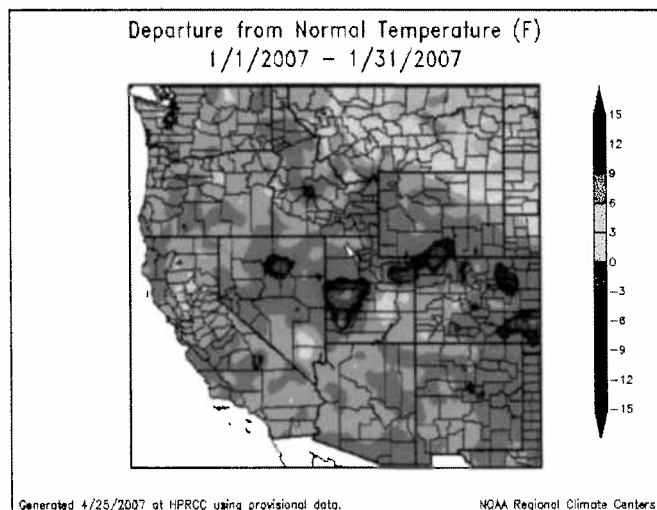
A very dry winter in Southern Nevada! January was a month of below normal temperatures and very little precipitation. Even in the Spring Mountains only 3 inches of snow fell all month. Cold temperatures dominated the region with many broken pipes and damaged citrus trees across the Mojave. A record low of 23° in Las Vegas was reported on the 14th.

Unlike the northern portion of the state February was well below normal precipitation in the South. It was the fourth consecutive month of below normal precipitation for Southern Nevada. The last two weeks of the month several low pressure systems crossed the area. Most of the precipitation fell in the Southern Sierra but 22 inches of snow reached the Spring Mountains.

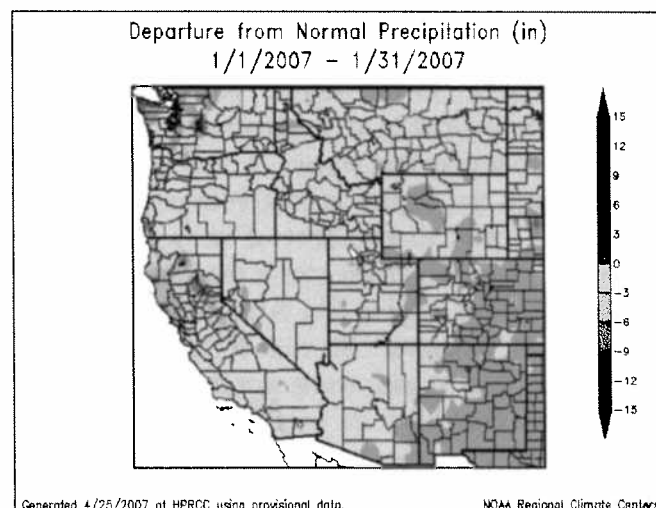
March was the fifth consecutive month of below normal precipitation. Stations across the region were at 50% of normal or less for the water year!

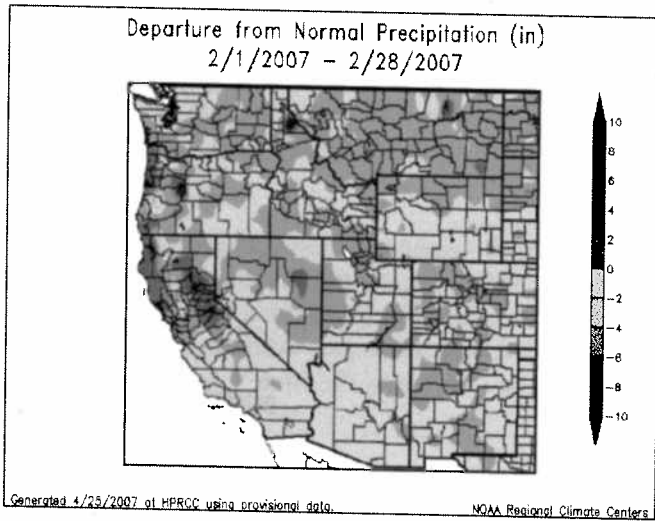


Departure from Normal Temperature plots



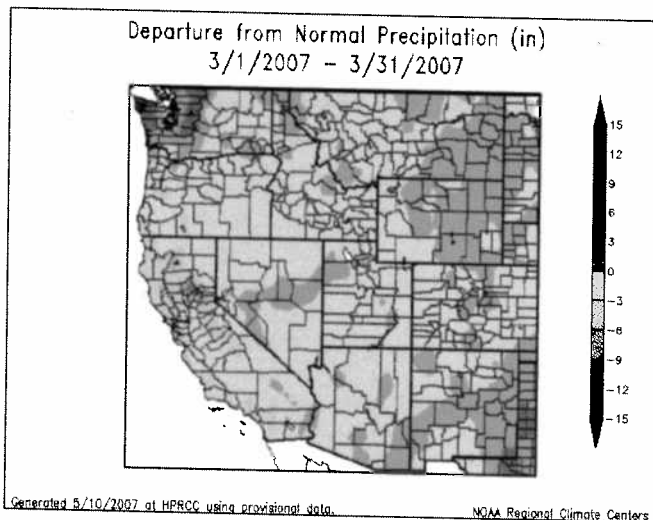
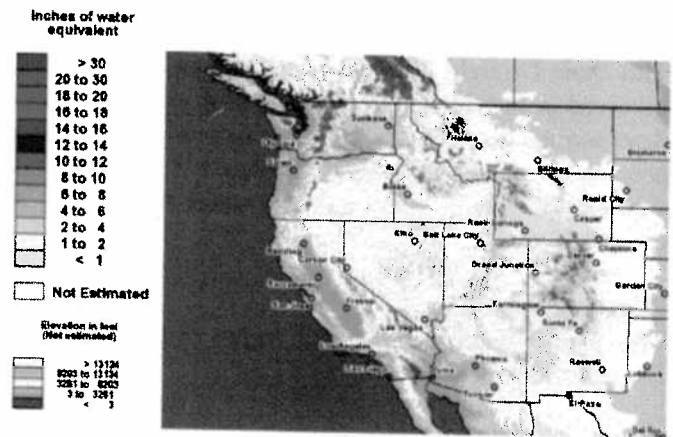
Departure from Normal Precipitation plots





Modeled snow water equivalent for May 14, 2007

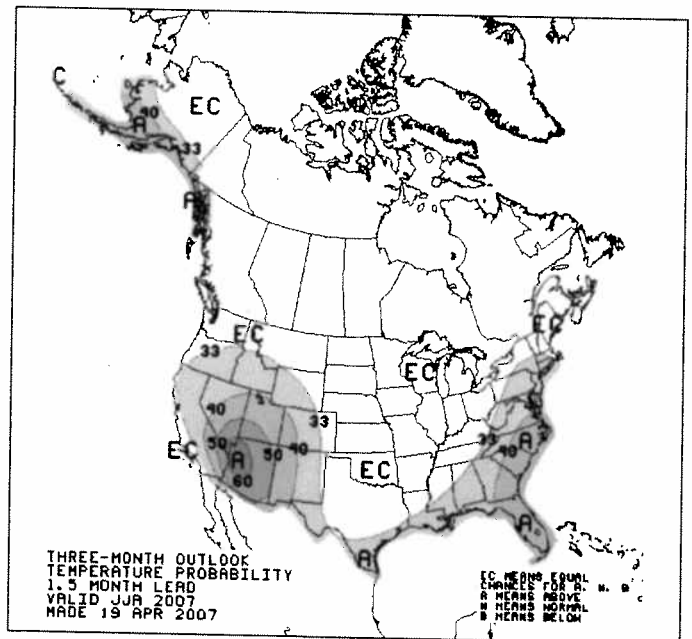
There is very little snow left in the high country right now. The very highest portions of the Sierra still have snow as well as a few ranges in Eastern Nevada.



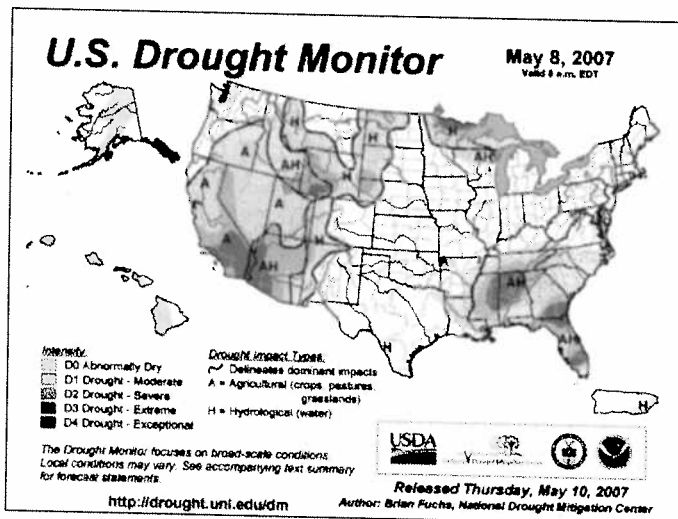
Official Seasonal Forecast

June-August 2007

From Climate Prediction Center



DROUGHT OUTLOOK



FEATURE ARTICLE:

By: Dr. Jeffrey Underwood

As the state of Nevada emerges from a winter with below normal snowfall, many in the state have begun to think about the return of drought conditions. In my travels around the state questions often arise about how drought is defined and analyzed in Nevada. The follow excerpt is taken from the *State of Nevada Drought Plan* of January 1991.

Purpose:

This State Drought Plan establishes an administrative coordinating and reporting system between agencies that should be involved in providing assistance to help mitigate drought impacts. The intent of this document is to establish a system for determining drought severity, for establishing a framework within which agencies would function, and to establish a process for obtaining federal assistance if required. This plan does not establish specific conservation measures for local entities nor does it affect existing water rights. This plan answers the question, "What is the State's response during a drought?"

Plan Organization:

This plan is centered around 3 stages of drought: The Drought Warning Stage, Severe Drought Stage, and Emergency Drought Stage.

During the Drought Warning Stage the Drought Review and Reporting Committee (DRRC), chaired by the State Climatologist, begins meeting in January. The DRRC, utilizing the various information sources of its members, will assess the hydrologic and climatic parameter and project future conditions. The DRRC will be comprised of the following membership (the chair will be the State Climatologist and other members will be appointed by the Governor as appropriate for the drought affected area):

- State Climatologist (Chair)
- Division of Emergency Management (Vice-chair)
- Clark County Representative
- Representative, Division of Water Resources
- Washoe County Representative
- Carson City Representative
- Manager of the Truckee Carson Irrigation District
- Upper Carson River Representative
- Manager Walker River Irrigation District
- Representative of the Pyramid Lake Indian tribe
- Westpac Representative
- Humboldt River Representative
- Central Nevada Representative

During a Severe Drought Stage the DRRC continues to meet, but is assisted by 3 Drought Impact Task Forces. The basic purpose of the Drought Impact Task Forces is to report on drought impacts and to recommend mitigating measures to the DRRC. In response to the impacts, the DRRC will make recommendations to the Governor for action. The 3 Task Forces are the **Agricultural Task Force**, the **Fish and Wildlife Task Force** and the **Municipal and Industrial Task Force**. The Lead State Agencies for these Task Forces are the State Department of Agriculture, Department of Wildlife, and Department of Administration, respectively. The directors of these Lead State Agencies act as chair for their respective Task Force. The individual State agencies and advisory groups which make up each State Drought Impact Task Force should name an agency drought coordinator and, by their own initiative, take appropriate measures in response to drought-related problems. In this regard, task force representatives must be able to speak for their agencies and have authority to make reasonable commitments toward effective cooperation and coordination. The task forces are outlined below:

AGRICULTURE TASK FORCE

- Department of Agriculture
- Cooperative Agricultural Extension Service
- Division of Water Resources and/or State Engineer
- USDA State and County Emergency Boards
- Bureau of Land Management
- Bureau of Reclamation
- Bureau of Indian Affairs (if drought affects Indian Tribe(s))

- U.S. Forest Service
- Farm Bureau
- Agricultural Stabilization and Conservation Service
- Soil Conservation District Association
- Soil Conservation Service
- Livestock, Feeds and Growers Associations
- Division of Emergency Management
- Member(s) from Affected Areas (s), including Indian Tribes

FISH AND WILDLIFE TASK FORCE

- Department of Wildlife
- Division of Forestry
- Division of State Lands
- Division of Water Resources
- Division of Emergency Management
- National Weather Service (Fire Weather Forecaster)
- U.S. Fish and Wildlife Service
- Bureau of Land Management
- National Park Service
- Bureau of Indian Affairs (if drought affects Indian Tribe(s))
- Member(s) From Affected Area (s), including Indian Tribes

MUNICIPAL AND INDUSTRIAL TASK FORCE

- Department of Administration
- Consumer Health
- Division of Economic Development
- Division of State Parks
- Division of Water Resources
- Division of Emergency Management
- Department of Human Resources
- Division of Environmental Protection
- Nevada Public Service Commission
- Commission on Tourism
- Banking Industry
- UNR/UNLV Economics Specialist
- Member (s) From Affected Areas (s), including Indian Tribes

During the Drought Emergency Stage the Drought Response Center (DRC) if formed. The purpose of the DRC is to reduce the number of decision makers and increase the level of governmental response during an emergency situation. The Drought Response Center is made up of the chairs of the Drought Impact Task Forces and is chaired by the Director of the Division of Emergency Management. The Drought Response Center receives input from the Drought Impact Task Forces and the DRRC. The DRC reviews the drought impacts and recommended mitigating measures. The DRC makes interagency policy and financial resource allocation recommendations to the Governor. The Governor provides DRC with policy and resource allocation direction, and the DRC in turn directs the Impact Task Forces and Lead State Agencies. The Governor deals with the State Legislature when new authority and funding is necessary. Further, if needs exceed the resources of the State; the Governor may request Federal Disaster Assistance. The DRC will coordinate Federal Disaster Assistance (Federal assistance which doesn't need State action should be implemented when necessary without going through the DRC).

STATISTICS FOR THE MONTH OF JANUARY 2007

	Extreme High	Day	Extreme Low	Day	Average High	Average Low	Average Monthly Temp	Precip	Snowfall
Climate Division 1 (NW)									
Cold Springs	54	3	-8	13	41	12	27	0.23	1.50
Dayton	56	10	0	13	46	17	31	0.13	1.00
Desert Valley (precip. only)	m	m	m	m	m	m	m	m	m
Fallon NAS	68	3	-3	13	44	12	28	0.10	0.00
Fernley	61	3	-2	13	45	15	30	0.23	2.50
Flanigan	60	3	-6	13	44	13	29	0.34	0.00
Flying M Ranch	m	m	m	m	m	m	m	m	m
Gardnerville	65	3	-10	13	45	12	28	0.68	3.50
Hay Creek	51	26	-2	13	39	15	27	0.39	4.20
Hualapai	m	m	m	m	m	m	m	m	m
Jacks Valley	57	3	3	14	42	22	32	0.91	
Lahontan Nat'l Fish Hatchery	64	3	-4	13		16		0.41	0.00
Minden	61	3	-7	13	43	15	29	0.46	1.50
Mogul	52	3	-5	13	40	16	28	0.40	
Reno, N. Virginia	57	3	3	13	44	18	31	0.23	0.70
Sheridan Acres	60	3	-6	13	41	16	28	1.21	5.60
Spanish Springs	59	3	-9	13	45	10	27	0.12	0.80
Sulphur	m	m	m	m	m	m	m	m	m
Vya-Shoestring	58	26	-6	12	40	9	25	0.26	
Washoe #10	m	m	m	m	m	m	m	m	m
Wellington	64	3	-8	13	44	11	28	0.19	0.00
Wilson Canyon	m	m	m	m	m	m	m	m	m
Climate Division 2 (NE)									
Jarbridge	58	25	-10	12	39	12	26	0.86	9.90
Reese River	60	3	-19	12	48	17	33	0.17	
Ruby Valley	m	m	m	m	m	m	m	m	m
Climate Division 3 (Central)									
Belmont	m	m	m	m	m	m	m	m	m
Gabbs	58	4	-3	13	39	16	27	0.36	0.00
Goldpoint	m	m	m	m	m	m	m	m	m
Manhattan	m	m	m	m	m	m	m	m	m
Marietta	68	3	-5	13	48	10	29	0.26	0.00
Pioche - Lister Ranch	53	4	-12	13				0.22	9.00
Schurz (precip. only)								0.00	0.00
Tonopah	60	3	-3	13	43	16	30	0.2	2
Climate Division 4 (S)									
Boulder Beach	m	m	m	m	m	m	m	m	m
Las Vegas (NWS Station)	68	4	23	14	56	36	46	0.06	0.00
Lee Canyon	m	m	m	m	m	m	m	m	m
Overton Beach	m	m	m	m	m	m	m	m	m
Sandy Valley (precip. only)								0.00	0.00
California Stations									
Bare Ranch	m	m	m	m	m	m	m	m	m
Janesville, CA	55	4	11	13	41	24	33	0.70	1.00
Tahoe Valley	48	24	3	13				1.33	8.30
Truckee/Tahoe AP Dist., CA	59	24	-7	14	40	8	24	0.94	

* - Incomplete data
nr - Not Recorded

STATISTICS FOR THE MONTH OF FEBRUARY 2007

	Extreme High	Day	Extreme Low	Day	Average High	Average Low	Average Monthly Temp	Precip	Snowfall
Climate Division 1 (NW)									
Cold Springs	63	3	8	2	49	24	37	2.00	14.30
Dayton	m	m	m	m	m	m	m	m	m
Desert Valley (precip. only)	m	m	m	m	m	m	m	m	m
Fallon NAS	m	m	m	m	m	m	m	m	m
Fernley	67	17	14	2	55	27	41	0.30	1.50
Flanigan	66	6	11	1	53	27	40	1.48	1.00
Flying M Ranch	m	m	m	m	m	m	m	m	m
Gardnerville	66	6	10	2	53	24	39	0.92	5.80
Hay Creek	63	7	15	2				0.78	4.00
Hualapai	m	m	m	m	m	m	m	m	m
Jacks Valley	64	6	23	24	51	33	42	1.81	
Lahontan Nat'l Fish Hatchery	67	6	16	2	54	28	41	1.22	
Minden	65	6	15	1	52	27	39	1.08	5.00
Mogul	62	18	16	2	50	28	39	2.88	
Reno, N. Virginia	67	6	16	2	53	29	41	1.29	4.00
Sheridan Acres	65	6	15	2	52	29	41	1.59	11.20
Spanish Springs	68	6	7	1	52	24	38	1.02	4.00
Sulphur	m	m	m	m	m	m	m	m	m
Vya-Shoestring	62	6	3	3	46	21	33	0.64	
Washoe #10	m	m	m	m	m	m	m	m	m
Wellington	68	6	9	1	53	25	39	0.61	
Wilson Canyon	m	m	m	m	m	m	m	m	m
Climate Division 2 (NE)									
Jarbridge	64	5	8	1	44	25	34	1.78	21.20
Reese River	60	3	-2	2	48	17	33	0.48	
Ruby Valley	m	m	m	m	m	m	m	m	m
Climate Division 3 (Central)									
Belmont	m	m	m	m	m	m	m	m	m
Gabbs	65	7	14	1	53	28	40	0.42	3.50
Goldpoint	m	m	m	m	m	m	m	m	m
Manhattan	m	m	m	m	m	m	m	m	m
Marietta	69	6	8	2	57	24	40	0.23	0.00
Pioche - Lister Ranch	63	6	7	2	50	23	37	0.50	8.00
Schurz (precip. only)								0.31	0.00
Tonopah	65	5	10	23	50	25	37	0.74	9.00
Climate Division 4 (S)									
Boulder Beach	m	m	m	m	m	m	m	m	m
Las Vegas (NWS Station)	74	16	34	3	65	44	55	0.16	T
Lee Canyon	m	m	m	m	m	m	m	m	m
Overton Beach	m	m	m	m	m	m	m	m	m
Sandy Valley (precip. only)								0.11	0.00
California Stations									
Bare Ranch	m	m	m	m	m	m	m	m	m
Janesville	62	7	20	27	50	33	41	6.65	28.00
Tahoe Valley	56	17	15	24	43	25	34	6.48	60.90
Truckee/Tahoe AP Dist.	61	17	8	2	45	22	34	5.75	59.10

* - Incomplete data
nr - Not Recorded

m - Missing data

STATISTICS FOR THE MONTH OF MARCH 2007

	Extreme High	Day	Extreme Low	Day	Average High	Average Low	Average Monthly Temp	Precip	Snowfall
Climate Division 1 (NW)									
Cold Springs	m	m	m	m	m	m	m	m	m
Dayton	m	m	m	m	m	m	m	m	m
Desert Valley (precip. only)	m	m	m	m	m	m	m	m	m
Fallon NAS	m	m	m	m	m	m	m	m	m
Fernley	85	12	20	3	70	34	52	0.04	0.50
Flanigan	80	16	22	1	67	31	49	0.12	
Flying M Ranch	m	m	m	m	m	m	m	m	m
Gardnerville	81	12	15	1	65	26	46	0.12	1.50
Hay Creek	78	14	15	1	60	31	45	0.23	2.00
Hualapai	m	m	m	m	m	m	m	m	m
Jacks Valley	75	12	22	2	63	37	49	0.47	0.00
Lahontan Nat'l Fish Hatchery	79	17	17	1	68	35	51	0.20	
Minden	m	m	m	m	m	m	m	m	m
Mogul	75	12	18	3	62	34	48	0.22	0.00
Reno, N. Virginia	81	16	20	1	67	34	50	0.14	0.30
Sheridan Acres	80	12	15	1	65	33	49	0.48	3.50
Spanish Springs	79	16	17	1	65	29	47	0.05	
Sulphur	m	m	m	m	m	m	m	m	m
Vya-Shoestring	72	18	10	1	55	26	40		
Washoe #10	75	12	16	1	64	33	48	0.13	
Wellington	80	12	15	1	66	31	48	0.27	
Wilson Canyon	m	m	m	m	m	m	m	m	m
Climate Division 2 (NE)									
Jarbridge	72	17	17	21	55	29	42	2.06	25.00
Reese River	78	16	11	1	59	22	41	0.59	0.00
Ruby Valley	m	m	m	m	m	m	m	m	m
Climate Division 3 (Central)									
Belmont	m	m	m	m	m	m	m	m	m
Gabbs	80	17	17	1	64	33	49	0.91	1.00
Goldpoint	m	m	m	m	m	m	m	m	m
Manhattan	m	m	m	m	m	m	m	m	m
Marietta	84	12	9	2	70	30	48	0.50	0.00
Pioche - Lister Ranch	76	18	-2	1	59	25	42	0.21	
Schurz (precip. only)	m	m	m	m	m	m	m	m	m
Tonopah	78	16	10	1	61	31	46	0.78	5.00
Climate Division 4 (S)									
Boulder Beach	m	m	m	m	m	m	m	m	m
Las Vegas (NWS Station)	91	17	35	1	76	53	64	0.01	0.00
Lee Canyon	68	17	5	3	50	21	36	1.79	11.5
Overton Beach	m	m	m	m	m	m	m	m	m
Sandy Valley (precip. only)								0.00	0.00
California Stations									
Bare Ranch	m	m	m	m	m	m	m	m	m
Janesville	m	m	m	m	m	m	m	m	m
Tahoe Valley	62	17	11	1	50	27	38	1.24	15.90
Truckee/Tahoe AP Dist.	72	16	2	2	57	21	39	0.69	7.00

* - Incomplete data m - Missing data
nr - Not Recorded